To: Ron Moulton, Western Area Power Administration, and Jennifer DeCesaro, DOE

From: Ian Benson, Director Transmission Planning & Business Relations, Xcel Energy

January 21, 2013

RE: Comments on the Department of Energy's and Western Area Power Administration's Defining the Future Draft Recommendations Document

Xcel Energy[1] appreciates the opportunity to comment on Western Area Power Administration's (Western) and the Department of Energy's (DOE) Draft Recommendations document issued by the Joint Outreach Team (JOT), officially noticed in the Federal Register dated November 20, 2012. Xcel Energy supports Western's efforts to identify and address stakeholder issues in a prioritized manner. Initiatives that promote overall improved reliability and operational efficiency of generation dispatch should be recognized for their societal value and accorded a high priority ranking.

The Draft Recommendations document issued by the JOT summarizes issues raised by Western's customers, tribes, and transmission customer stakeholders during the structured public outreach effort. To address the identified issues, the JOT developed recommendations for improvements to support a more resilient and flexible transmission grid while ensuring reliable service.

Xcel Energy has reviewed these Draft Recommendations and offers the comments shown below. Xcel Energy believes actions to address the Priority One Recommendations are most important and should be addressed concurrently. Priority Two Recommendations could be addressed once the measures to implement the Priority One Recommendations have been implemented.

Priority One Recommendations

Recommendation: (Page 24) Undertake a study to evaluate the benefits and costs to Western and its customers, tribes, and stakeholders in participating in either regional or sub-regional initiatives investigating energy imbalance markets. The study should

[1] Xcel Energy is the seventh largest investor-owned transmission system in the United States with more than 18,000 miles and nearly 900 transmission and transmission/distribution substations in 10 states. Major control centers are in Minneapolis, MN; Golden, CO; Eau Claire, WI; and Amarillo, TX. In addition to our electric system, we also operate an extensive natural gas transmission system in Colorado. In other states, where we distribute natural gas, we purchase it from major interstate providers.

identify methods that enable Western's impacted parties to maximize the physical benefits of sub-hourly generation scheduling and inter-BA coordination.

Xcel Energy Response: *Xcel Energy strongly supports Western's proposal to evaluate options for participation in existing or emerging electric markets. Xcel Energy believes the questions laid out in the Recommendation are valid questions, however, significant information has already been developed that addresses most, if not all, of these issues for both existing and emerging markets. Xcel Energy recommends that Western avail itself of this publically available information rather than undertaking a new study. Xcel Energy would be interested in further discussion with Western and its preference customers regarding the relative merits of regional dispatch improvements, an imbalance market in the west, or participation in one of the existing RTOs. For this reason, Xcel Energy recommends modifying this JOT recommendation shown above to read as follows:*

> *Using publically available information, Western will collaborate with its preference customers and other third parties such as tribes and transmission customers, as appropriate, to evaluate opportunities associated with participating in development of an energy imbalance market. Once this evaluation is completed, Western will provide to its stakeholders a recommendation on which direction to take in the future to maximize the net benefits to stakeholders. The evaluation will address the following list of issues: (list excluded)*

Xcel Energy provides the following responses to the bulleted items contained in this Recommendation:

Bullet 1: Xcel Energy agrees that the benefits of participation in an imbalance market must outweigh the costs. In light of market operator cost proposals received from SPP and CAISO, it is clear that the anticipated benefits of participation in such an initiative far outweigh anticipated costs.

Bullet 2: Regarding legacy infrastructure, it is not clear to Xcel Energy what is meant by legacy infrastructure. From whom does Western propose to collect the cost of legacy infrastructure, market participants or existing customers/ratepayers?

Bullet 3: Xcel Energy agrees. All studies of which we are aware continue to show that markets can better integrate renewable energy resources than standalone BAs.

Bullet 4: The intent of this bullet is not clear to Xcel Energy. Is this a generation efficiency issue, transmission efficiency or ultimate customer cost reduction that will determine operational efficiency?

Bullet 5: Xcel Energy agrees. Studies conducted to date indicate markets improve/increase reliability.

Bullet 6: It is not clear what participation costs are included or how market beneficiaries are defined. Please provide more detail.

Bullet 7: Contract rights holders will continue to have priority access rights to the transmission system. However, an imbalance market would facilitate enhanced use of existing grid resources, mitigating the need for additional resources and resulting in reduced costs to customers.

Bullet 10: If withdrawal is a matter of interest to Western, Xcel Energy supports Western raising the issue for discussion in an appropriate stakeholder forum.

Bullet 12: This is a market monitoring issue that must be addressed in any market construct.

Recommendation: (Page 18) Conduct a study across Western's DSW, CRSP, and RMR service areas to identify combined transmission system (CTS) opportunities; while encouraging continued CTS efforts in Western's SNR and UGP service areas.

In collaboration with customers and stakeholders, Western should study where opportunities exist for increased integration of transmission systems in its regions; support efforts already underway; and implement cost-effective solutions where benefits are clearly identifiable and assignable, and cost-shifting is minimal.

Western would begin scoping out two individual CTS studies: 1) an integrated study looking at CTS opportunities across the RMR, DSW, and CRSP Management Center service areas, and 2) a study conducted across each region to determine opportunities for greater integration within that region, taking into account the unique aspects of each region's service area. Western would determine the merits of moving a CTS study(s) forward with one or more regions. Should the study(s) move forward, Western would competitively seek a qualified contractor to provide technical support in conducting the CTS study(s). Additionally, Western would identify and request customer, tribal, and stakeholder participation.

Xcel Energy supports Western's efforts to evaluate CTS opportunities. Xcel Energy recommends that such efforts not be limited to CTS opportunities within Western's service area, but include a broader evaluation of a regional network transmission tariff to augment a more efficient regional dispatch system in the Rocky Mountain region. Xcel supported this concept during the Loveland meeting and believes it is time to start the conversation. As an early adopter of renewables in its systems, Xcel has found great benefits in its SPS and NSP companies of having an independent market operator dispatch a combined system on a security constrained economic basis, with the resulting transfers of power between participants being contained within a regional transmission tariff. We recognize that, in the West, the regional tariff concept will require a significant effort by potentially interested parties and that issues such as cost shifts will have to be addressed in those negotiations. Xcel is

interested in pursuing these discussions as soon as possible, with the WAPA-Basin-Heartland Integrated Transmission System being a potential framework to use as a model.

Recommendation: (Page 8) Undertake an analysis to determine the regulation reserve capability that is required for each of Western's BAs or sub-BAs using a consistent methodology and criteria. Additional analysis should be conducted to determine the regulation reserve capability that is available from all dispatchable generation sources within each of Western's BAs or sub-BAs. The estimated time frame for completing this recommendation is less than one year for each Western BA and sub-BA.

Xcel Energy Response: Xcel Energy supports this recommendation; however, the timeline proposed may be too protracted for Western to have an impact on NERC's efforts to develop a standard on Reliability Based Control (RBC). NERC documents state that the posting for ballot will occur In January, 2013. If the RBC standard is approved by industry, Xcel Energy recommends Western initiate steps toward efficient compliance with the revised standard.

Bullet 2 on Page 13: Improving administration of its customer Integrated Resource Planning (IRP) program

Xcel Energy Response: More clarity/transparency in the published IRP specifically stating the amount of increased generation from Federal resources (e.g., USBR) and others to serve increasing customer load requirements would be useful given the highly interconnected nature of the bulk power system. This information would include publicly available information on incremental generation resource additions, incremental customer loads, and where possible, incremental flow changes on the transmission system. This information may allow both Western and Xcel Energy to optimize their connected systems to ensure greater reliability and lower costs for customers. Xcel Energy appreciates Western's efforts to engage more fully in WECC forums and planning efforts. Nevertheless, additional engagement by Western on other initiatives such as the long-range planning tool would be beneficial to others in the WECC.

Bullet 3 on Page 13: Identifying opportunities where Western can partner with customers, stakeholders and others to develop a stronger and more flexible transmission grid

Xcel Energy Response: Xcel Energy believes that Western should evaluate whether the Mt. Elbert pumped storage facility should be used for regulation and energy storage of variable resources. Utilization of Mt. Elbert in this manner may provide additional operational flexibility and provide economic benefits to Western and its customers.

<u>Recommendation</u>: (Page 16) Perform a Western-wide infrastructure investment study (IIS). The IIS would determine the state of Western's infrastructure and the commercial value of transmission paths over which Western transacts business to ensure continued reliability on the system and to maximize return on investment, prioritize grid capital investment projects identified and proposed in Western's 10-year transmission plan as well as interconnection-wide, interregional, regional and sub-regional expansion planning processes.

Western should broaden its current transmission planning process to include important data and information on the value of Western's transmission assets and existing transmission paths. Doing so would improve Western-wide planning decisions; reduce inconsistencies within Western through the development of a consistent IIS model and decision making protocol; allow Western staff to be better informed about system conditions with regard to capacity and adequacy; and complement on-going WestConnect and Western Electricity Coordinating Council (WECC) transmission planning efforts.

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<u>Xcel Energy Response</u>: Regarding prioritizing projects/capital investments and maximizing return on investment, Western could reference the NREL study titled "Transmission Assessment and Application Guide (NREL Report Number NREL/SR-5500-53696)" that was issued in the September 2012. This study is posted to the NREL website and will form one of the foundational aspects to the WIEB's follow up efforts to this report in 2013. Western and its neighbors would benefit from Western's participation in the WIEB follow-up efforts in 2013.

Regarding both reliability and economic planning, Western should expand activities in the WECC planning processes by supplying public data for models and studies for both TEPPC and PCC, in support of 10-Year and 20-Year study efforts. The benefit of this enhanced support would be more complete and accurate models, hence more accurate studies and analyses.

WestConnect has developed a process to provide coordinated interregional planning as a result of FERC Order 1000. It would be beneficial for Western to address this recommendation in coordination with the Order 1000 efforts at WestConnect. If Western does not plan to integrate its efforts with the larger Order 1000 effort Western should detail to stakeholders in the west how it plans to synchronize and align its activities with other planning activities in the West and across the country .

Regarding timing for this JOT Recommendation, Western could start supplying public data on its system to WECC and other industry forums at the start of 2013. Regarding timing for completion of studies, it would seem three years is a long time. It would seem two years would be adequate and would synch nicely with current WECC and other planning activities timelines in the West (e.g., WestConnect and others FERC planning timelines).

Xcel Energy is intrigued by Western's proposal to "rightsize" its system. Xcel Energy recommends that Western provide more details about its plans in an appropriate WECC planning forum.

Recommendation: (Page 22) Pursuant to FERC Order No. 764 (Integration of Variable Energy Resources (VER)), Western BAs/sub-BAs should work with regional reliability organizations, Western regional offices, customers, tribes, and stakeholders to coordinate the implementation of intra-hour scheduling consistent with neighboring utilities, including the implementation of 15-minute scheduling.

Xcel Energy Response: Xcel Energy strongly supports this recommendation and encourages Western to implement its system enhancements in accordance with the requirements and deadlines specified in Order No. 764.

Recommendation: (Page 23) Western BAs and sub-BAs in WECC's footprint should evaluate the benefits and costs of ADI, RBC, and DSS, and if appropriate, proceed with implementation. The control systems may be modified to accept the programming requirements needed to implement any of the initiatives.

Xcel Energy Response: *Xcel Energy's PSCo BA is geographically surrounded by Western's BA. Western's participation in the ACE Diversity Interchange (ADI) would bring benefits to Western and other entities in the western interconnection and would enable Xcel Energy to participate in ADI. Since the cost to participate in ADI is relatively low (forecast cost for 2013 is approximately $23,000 per participant) and reduces wear on generators providing regulation, Xcel Energy recommends that Western directly engage in ADI through a trial participation rather than attempt to study the issue using hypothetical information.*

With regard to DSS, it is not clear to Xcel Energy what additional analysis is needed to support Western's participation. In Xcel Energy's view, the benefits are clear and outweigh the costs. Xcel Energy recommends that Western proceed with DSS as expeditiously as possible.

Priority Two Recommendations

Recommendation: (Pages 12, 14, and 18)

(Page 12) Initiate a collaborative process with Western regional offices, customers, tribes, and stakeholders to identify the best rate-setting methodologies currently in use by one or more of Western's regions. To the extent possible, explore the potential to harmonize transmission and ancillary service rate setting methodologies across Western.

Additional services, such as load-following service and generation-based ancillary services should be investigated through this process for possible addition to Western's portfolio of products.

AND

(Page 14) Initiate a collaborative process with Western regional offices, customers, tribes, and stakeholders to identify the best rate-setting methodologies currently in use by one or more of Western's regions. To the extent possible, explore the potential to harmonize transmission and ancillary service rate setting methodologies across Western.

AND

(Page 18) Conduct a study across Western's DSW, CRSP, and RMR service areas to identify combined transmission system (CTS) opportunities; while encouraging continued CTS efforts in Western's SNR and UGP service areas.

In collaboration with customers and stakeholders, Western should study where opportunities exist for increased integration of transmission systems in its regions; support efforts already underway; and implement cost-effective solutions where benefits are clearly identifiable and assignable, and cost-shifting is minimal.

Western would begin scoping out two individual CTS studies: 1) an integrated study looking at CTS opportunities across the RMR, DSW, and CRSP Management Center service areas, and 2) a study conducted across each region to determine opportunities for greater integration within that region, taking into account the unique aspects of each region's service area. Western would determine the merits of moving a CTS study(s) forward with one or more regions. Should the study(s) move forward, Western would competitively seek a qualified contractor to provide technical support in conducting the CTS study(s). Additionally, Western would identify and request customer, tribal, and stakeholder participation.

> *<u>Xcel Energy Response</u>: Xcel Energy supports Western's interest in providing the best possible service to customers at transparent and reasonable rates. Xcel Energy therefore supports Western's interest in rationalizing rate-setting mechanisms across its footprint and establishing consistency where appropriate. In addition, Xcel Energy believes that offering additional ancillary services may help Western in meeting the renewable integrating needs of its customers.*
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> *As noted above, Xcel Energy also strongly believes that there may be opportunities to improve reliability and use of the transmission grid in the west by developing coordinated network service across a large footprint, potentially including PSCo and other entities in Colorado. Xcel Energy is working to initiate discussions to evaluate such an option and would welcome Western's engagement in those discussions.*

<u>Recommendation</u>: (Page 16) The IIS would provide the most value as an annual process. Further, the data collection and model development should be done in collaboration with other related industry efforts to enable the broadest benefits

Xcel Energy Response: It might make sense for the first couple of studies to be annual; however, longer term it might be more cost-effective to synchronize Western's studies with biennial studies to be conducted by others in the Western Interconnection.

Conclusion

Thank you for the opportunity to comment on Western's and the Department of Energy's "Defining the Future" Draft Recommendations document. Xcel Energy supports broad, open outreach on these critical issues and looks forward to working with Western and other interested parties to move forward with development of efficient regional energy markets and improved transmission planning processes to ensure reliability and maximize system efficiency.